RULES
OF
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF COMMUNITY ASSISTANCE

CHAPTER 1200-22-1
PRIORITY RANKING SYSTEM

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1200-22-1-.01 INTRODUCTION. The purpose of these rules is to set forth criteria and procedures for developing and maintaining a priority ranking system and list for the financing of wastewater treatment works and wastewater facilities. The priority system as described in this rule will form the basis for eligibility determinations and allocation of financial assistance as may be available from the Department of Environment and Conservation. Pursuant to T.C.A. Title 68, Chapter 221, Parts 8 and 10, the State of Tennessee is authorized to provide financial assistance to municipalities for the construction of wastewater treatment works and wastewater facilities which appear on the Department's project priority list. Each project's priority point value is generated from the priority ranking criteria and formula according to these rules. A potential recipient will be placed on the priority list once a priority point value has been established by the Department. The process of being placed on the priority list may be initiated either by the Department or by the request of a potential recipient to the Department. The Department shall maintain the priority list.

Authority: *T.C.A. §§68-221-804, 68-221-805, 68-221-1005, and 4-5-202.* ***Administrative History:*** *Original rule fined August 30, 1985; effective September 29, 1985. Amendment filed September 26, 1986; effective November 10, 1986. Amendment filed November 20, 1987; effective January 4, 1988. Amendment filed September 18, 1989; effective November 2, 1989. Repealed and new rule filed September 17, 1992; effective November 2, 1992.*

1200-22-1-.02 DEFINITIONS.

(1) Collector Sewer. The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewater's directly from facilities which convey wastewater from individual systems or from private property, and which include service connections designed for connection with those facilities including:

(a) Crossover sewers connecting more than property on one side of a major street, road, or highway to a lateral sewer on the other side when more cost effective than parallel sewers;

(b) Except as provided in this section, pumping units and pressurized lines serving individual structures or groups of structures when such units are cost effective and are owned and maintained by the municipality; and

(c) This definition excluded other facilities which convey wastewater from individual structures, from private property to the public lateral sewer, or its equivalent.

(2) Combined Sewer Overflow (CSO). A discharge from a sewer that is designed as a sanitary sewer and a storm sewer.

(3) Infiltration/Inflow Correction. Techniques which eliminate excessive infiltration/inflow. This definition refers to excessive infiltration/inflow reduction techniques that do not involve extensive excavation and/or replacement. Techniques considered to be infiltration/inflow correction include, but are not limited to, the following:

(a) Pressure testing and sealing procedures;

(b) Excavation and replacement where documented and severe infiltration/inflow problems can be corrected. Specific examples are replacing or repairing manhole covers, repairing crushed pipe within an area of temporary or permanent groundwater and replacement or repair of a sewer segment beneath a waterway; and

(c) Trenchless technologies such as sliplining.

(4) Interceptor Sewer. A sewer which is designed for one or more of the following purposes:

(a) To intercept wastewater from a final point in a collector sewer and convey such wastes directly to a treatment facility or another interceptor;

(b) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant;

(c) To transport wastewater from one or more municipal collector sewers to another municipality or to a regional plant for treatment; or

(d) To intercept an existing major discharge of a raw or inadequately treated wastewater for transport directly to another interceptor or to a treatment plant.

(5) Major Sewer Rehabilitation. Techniques which involve the removal of the existing pipes or manholes from the ground and replacing them with new ones. This definition is considered applicable for this Chapter under one or more of the following conditions:

(a) In locations where pipes or manholes have lost their structural integrity, such as pipes or manholes which are collapsed, broken, or badly deteriorated and cracked;

(b) In cases where pipe size enlargement, change in grade and/or line realignment are needed in addition to pipe deficiency corrections; or

(c) In cases where the causes of damages to the existing pipes or manholes, including but not limited to corrosion, soil movement, and increasing traffic load, have been identified and it is desirable to prevent the recurrence of these damages by replacing the existing structures with new ones having better quality and greater strength.

(6) Modification/Replacement (M/R) Projects. Innovative or alternative elements of a project or significant elements of a complete wastewater treatment system which the project is a part fails to meet project performance standards.

(7) Nonpoint Source (NPS) Pollution. Pollution emitting from sources other than point source.

(8) Planning/Design. Facilities planning consists of those necessary plans and studies which directly relate to wastewater facilities or treatment works needed to comply with the requirements of the departmental rules, sections 1200-22-2-.08 and 1200-22-6-.06. Design consists of those necessary drawings, plans and specifications which directly relate to wastewater facilities or treatment works needed to comply with the approved facilities plan.

(Rule 1200-22-1-.02, continued)

(9) Pump Station/Force Main. A pump station is a mechanical device which raises and transfers wastewater. A force main is a pipe conveyance system for wastewater which is under hydraulic pressure due to energy imparted by a pump.

(10) Refinancing. A project previously constructed for which revolving loan funds may buy or refinance local debt obligations where the initial debt was incurred after March 7, 1985. Projects which have incurred debt using their own means of financing must have met the requirements of Chapter 1200-22-6 to be eligible for refinancing.

(11) Sewage Treatment Plant (STP). Any facility whose purpose is to store, treat, neutralize, stabilize, recycle, reclaim or dispose of municipal sewage or wastewater.

All other terms used in this Chapter are as defined in Chapter 1200-22-and Chapter 1200-22-6 unless the context requires otherwise.

Authority: *T.C.A. §§ 68-221-804, 68-221-805, 68-221-1002, and 68-221-1005.* ***Administrative History:*** *Original rule filed August 30, 1985; effective September 29, 1985. Amendment filed November 20, 1987; effective January 4, 1988. Amendment filed August 12, 1988; effective September 26, 1988. Amendment filed September 18, 1989; effective November 2, 1989. Repealed and new rule filed September 17, 1992; effective November 2, 1992.*

1200-22-1-.03 PRIORITY RANKING CRITERIA AND FORMULA.

(1) General Provisions for Ranking Criteria and Formula.

(a) Purpose. The following priority ranking criteria have been developed and are designed to achieve optimum water quality management consistent with the goals and requirements of the Federal Clean Water Act and the Tennessee Water Quality Control Act. The following projects may be eligible for funding in accordance with these Rules, including but not limited to:

[Note: The definitions section 1200-22-1-.02, of these rules describes each type of project.]

1. Collector Sewers;

2. Combined Sewer Overflow (CSO);

3. Infiltration/Inflow (I/I) Correction;

4. Interceptor Sewer;

5. Major Sewer Rehabilitation;

6. Modification/Replacement (M/R)

7. Nonpoint Source (NPS);

8. Planning/Design;

9. Pump Stations/Force Main;

10. Refinancing; and

11. Sewage Treatment Plant (STP).

(b) Combined Project Priority Ranking.

1. When a municipality recipient operates or proposes to operate more than one STP, priority point values will be independently calculated for each STP discharge point on the basis of data specific for that particular STP's discharge point.

2. When more than one project appears on the priority list which is an integral part of the cost-effective solution for one (1) Facilities Planning Area, all projects may have the same priority point value for the STP which will receive and treat the combined wastewater flow.

(c) The priority list is composed of projects that are assigned a numerical point value based on the project criteria and/or the priority point value (PPV) formula. The project criteria points are based on the individual project for which the municipality has requested financial assistance. A given project criteria point value shall be assigned a project pursuant to Rule 1200-22-1-.03(2). The (PPV) formula assigns numerical points to a specific sewage treatment plant project based on the following factors:

1. Receiving Stream Priority;

2. Severity of Pollution Factor; and

3. Water Quality Improvement Factor.

The specific formula for calculating these three factors is delineated under Rule 1200-22-1-.03(3). Certain types of wastewater facilities projects may receive a priority point value, per paragraph (3) of this Section, plus project criteria points. per paragraph (2) of this Section, in order to be assigned a numerical point value for placement on the priority list.

(2) Project Criteria. Project criteria points shall be assigned to individual wastewater facilities projects based on the following:

(a) STPs under a Commissioner's Order and/or State or Federal Court Order that requires the construction of a wastewater treatment plant shall have an additive of 100 points to the calculated PPV. STPs with a compliance schedule in the NPDES permit requiring construction shall have an additive of 50 points to the calculated PPV.

(b) Other wastewater treatment works under a Commissioner's Order and/or State or Federal Court order that requires construction shall have an additive of 50 points to the applicable project criteria points.

(c) Nonpoint source (NPS) Pollution projects have ten points. NPS projects may be directed toward protection or improvement of groundwater or surface water, including wetlands. In addition, NPS projects must be consistent with the approved Nonpoint Source Management Program.

(d) Combined Sewer Overflow (CSO) projects shall have 15 points.

(e) Infiltration/Inflow (I/I) correction shall have 15 points.

(f) Collectors which are to be constructed to address an existing public health problem will receive a minimum of 7.5 points. Public health problems involving failed septic tanks which are more than ten years old will receive a priority point value based on the septic tank failure rate. The septic tank failure rate will be determined by a survey based on either color infrared aerial photography

or ground inspections. Results of the survey must be certified by the Department before being used in this calculation. Projects which have not had a septic tank survey will automatically receive 7.5 points. The priority point calculation for failed septic tanks which are more than ten years old is as follows:

$$PPV = 75 \times \% \text{ septic tanks failing}$$

STP's which are required to serve new collectors as part of the approved facilities plan will receive the same PPV as the collectors.

Collectors which are proposed for growth or to serve currently undeveloped areas will receive five points.

(g) Major Sewer Rehabilitation projects shall have eight points.

(h) STPs built for development and/or growth potential, i.e., no water quality problem or public health problem, shall have five points.

(i) Pump Stations and interceptors shall have five points. Interceptors and/or Pump Stations that eliminate and STP discharge point which was part of a facilities plan shall have the same priority points as STP.

(j) Modification/Replacement projects shall have a PPV of the failed innovative/alternative project.

(k) Planning/Design shall have a PPV based upon the proposed project type.

(l) Refinancing of a project shall have one point.

(3) PPV Formula.

The formula used to determine the PPV for STPs for the ranking of projects is as follows:

Priority Point Value (PPV) = (Receiving Stream Priority) x
(Severity of Pollution Factor) x (Water Quality Improvement Factor)

(a) Receiving Stream Priority (RSP) will be equal to the hydraulic factor which is defined as the Ratio of plant discharge to stream flow.

$$RSP = \text{Hydraulic Factor} = 1.0 + \frac{\text{Plant Flow}}{\text{Stream Flow} + \text{Plant Flow}}$$

1. Stream flow is the lowest stream flow in any 3 consecutive days in a 20 year period measured upstream of the STP discharge or dilution flow for impoundments as determined by the Department.

2. Plant flow is the average daily flow in accordance with latest EPA Form 7500-5 Report or as certified by the Department.

(b) Severity of Pollution Factor (SPF) is the number obtained from the following calculation:

$$SPF = 1.0 + (\text{Violation Factor})$$

The Violation Factor is the sum of values from 1,2,3,4 below based upon Ultimate Effluent Limits as established by the Department.

(Rule 1200-22-1-.03, continued)

1. BOD5 (Point Value for (1))
   Where the Actual Amount in the STP effluent exceeds Ultimate BOD5 Limit ..... 1.0 point

2. Ammonia Nitrogen (NH3-N) Violation (Point Value for (2))
   Where the Actual Amount in STP effluent exceeds Ultimate Ammonia Nitrogen (NH3-N) Limit..... 1.0 point

3. Dissolved Oxygen Violation(Point Value for (3))
   Where the Actual Amount is less than the Ulitmate Dissolved Oxygen Limit..... 0.5 point

4. Fecal Coliform Violation (Point Value for (4))
   Where the Actual Amount exceeds Ultimate Fecal Coliform Limit 0.1 point

(c) The purpose of calculating a Water Quality Improvement Factor (WQIF) for Priority Water Areas is to determine whether or not the completed wastewater treatment facilities meet the applicable Ultimate Effluent Limitations. The Ultimate Effluent Limitations on Biochemical Oxygen Demand (BOD5), Total Suspended Solids (TSS), Settleable Solids, pH, Fecal Coliform, Dissolved Oxygen (DO), and Ammonia Nitrogen, if met, will improve the water quality to a level which achieves the standards for the established stream use classification(s).

The calculation for the Water Quality Improvement Factor (WQIF) is the number obtained from the following formula:

WQIF = 1.0 + F + G + H

1. Recreation is denoted as (F) for calculating WQIF.

   (i) If the discharge violates recreational bacterial standards (Chapter 1200-4-3) and causes a significant adverse impact on, or precludes the actual use of the receiving waters for body contact recreation beyond the mixing zone, a value denoted as (f) for calculating WQIF is obtained in the amount of ……..2 pts.

   (ii) If there is no significant impact on recreation a value for (F) is denoted by …..0 pts.

2. Fish and Aquatic Life is denoted as (G) for calculating WQIF.

   (i) If the discharge contains one or more conventional pollutants in excess of the ultimate limits contained in the NPDES Permit or as otherwise established by the Department, or results in violations of the dissolved oxygen standard for fish and aquatic life (Chapter 1200-4-3) in the receiving waters beyond the mixing zone, a value for (G) is denoted by.....3 pts.

   (ii) If there is no significant impact on fish and aquatic life a value for (G) is denoted by ……

3. Domestic Water Supply is denoted as (H) for calculating WQIF.

   (i) If the discharge contains one or more conventional pollutants in concentrations which violate the domestic water supply standard (Chapter 1200-4-3) in waters, affecting and existing community water treatment plant, a value for (H) is denoted by.....……..……4 pts.

(Rule 1200-22-1-.03, continued)

(ii) If there is no significant adverse impact on domestic water supply a value for (H) is denoted by.....0 pts.

4. No water quality improvement factor points shall be awarded for (F), (G) and (H) if the existing treatment facility is not operated and maintained properly, as determined by the Department's operation and maintenance evaluation.

5. The Water Quality Improvement Factor will only be given for (F), (G) and/or (H) when, in each case, it is documented that the completed wastewater treatment facilities, by meeting ultimate effluent limitations for the conventional pollutant(s), will improve the water quality to a level which achieves the standards for the particular use classification(s). Parameters other than conventional will not be considered in this evaluation.

Authority: *T.C.A. §§68-221-804, 68-221-805, 68-221-1002, and 68-221-1005.* ***Administrative History:*** *Original rule filed August 30, 1985; effective September 29, 1985. Amendment filed September 26, 1986; effective November 10, 1986. Amendment filed November 20, 1987; effective January 4, 1988. Amendment filed August 12, 1988; effective September 26, 1988. Amendment filed September 18, 1989; effective November 2, 1989. Repealed and new rule filed September 17, 1992; effective November 2, 1992.*

1200-22-1-.04 PROGRAM MANAGEMENT.

(1) Priority List.

(a) At such time the project is to be placed on the priority list, the municipality is responsible for providing to the Department in writing individual project information, including, but not .limited to a detailed project description, a schedule of events, and up-to-date project cost estimates. The department may adjust the cost estimate(s).

(b) Using the project cost estimate(s) as delineated on the priority list, the Department shall notify a sufficient number of potential recipients in order to allocate available funds. Upon receiving written notice from the Department, the potential recipient shall have ninety (90) days in which to submit a complete application pursuant to Chapters 1200-22-2 and 1200-22-6.

(c) The priority of available funds will be given to those projects with the highest priority point value, with precedence given to those projects that are ready to proceed.

(d) The Department may bypass a project(s) on the priority list that is not ready to proceed as determined by the requirements under Chapters 1200-22-2 and 1200-22-.06. The Department may also bypass a project(s) that does not submit a complete application ninety(90) days after notification from the Department.

(e) Projects with a lower priority point value may be fundable by virtue of bypass. Precedence will be given to those projects making progress towards compliance with the enforceable requirements of the Clean Water Act.

(f) Effective April 15, 1992, and each year thereafter, projects on the priority list will be removed. Projects may be reinstated upon receipt of the information as stated in 1(a).

(g) The Department may remove a project from the priority list when financial assistance has been awarded. In addition, the Department may remove a project(s) upon written request from the recipient that they no longer want to include their project on the priority list.

(Rule 1200-22-1-.03, continued)

Authority: *T.C.A. §§68-221-804, 68-221-805, and 68-221-1005.* ***Administrative History:*** *Original rule filed august 30, 1985; effective September 29, 1985. Amendment filed September 26, 1986; effective November 10, 1986. Amendment filed November 20, 1987; effective January 4, 1988. Amendment filed August 12, 1988; effective September 26, 1988. Amendment filed September 18, 1989; effective November 2, 1989. Repealed and new rule filed September 17, 1992; effective November 2, 1992.*